DR Data Task Force Meeting
April 28 2008
Austin, Texas

A total of 15 persons participated – 12 in person and 3 via teleconference.

Mark introduced the NERC-sponsored DR data task force and its objectives, referring to the DSM Task Force report.[1] Mark noted that NERC already has all the authority it needs to undertake this effort based on NERC Standards MOD16-21. However, guidelines and protocols for data reporting have yet to be developed.

Mark presented the taxonomy of DSM presented in the Task Force report and reiterated that the data reporting efforts would be phased in, with the initial focus being on dispatchable-controllable category of DR programs. Mark also made it clear that NERC was interested only in DR that had a reliability impact or benefit. For example, NERC would not be interested in demand bidding programs that only had energy market benefits. Paul Wattles introduced the notion of DR benefits falling into four market or value buckets – energy, capacity, reserves, and regulation. Clearly DR providing capacity and reserves are of interest to NERC, and DR providing energy is not. We discussed whether DR providing regulation had a reliability benefit and decided yes.

I introduced the concept that energy efficiency should be included in any eventual NERC data reporting protocol because energy efficiency is providing reliability benefits and acting as a capacity resource in some wholesale markets (e.g., ISO-NE's forward capacity market). This was agreed on in principle with the proviso that it would likely be in a Phase II or III of this effort.

We discussed parallel activities focused on DSM data reporting, including not only the EIA-861 DSM reporting activity and the previous FERC surveys but also the DR survey efforts of EEI, CPUC, and specific RTOs (e.g., MISO and SPP). It was suggested that NERC consider taking on a broader coordinating role to help standardize data collection and avoid "survey fatigue" on the part of DR program administrators. However, no agreement or resolution was reached on this issue.

There was some discussion about whether the NERC data protocols would encompass just wholesale DR programs but retail DR programs as well. It was noted that collecting data from ten ISOs was much easier than collecting data from 10,000 LSE and CSPs. It was also noted that any parallel wholesale and retail surveys should take care to avoid double-counting, as retail DR typically responds to regional operator commands. No clear resolution was reached on this other than wholesale reliability-oriented DR programs were a good starting point.

Much of the day was spent discussing what DR metrics were important. We discussed which metric gave the best picture of the DR resource - subscribed demand, expected demand, delivered (or realized) demand - and agreed that realized demand or actual

[1] ftp://ftp.nerc.com/pub/sys/all_updl/docs/pubs/NERC_DSMTF_Report_040308.pdf

performance when called was the single most critical metric. Any data collected should help NERC and RTOs answer some basic questions: (i) How many times was DR used for reliability reasons; (ii) How much DR was expect for each event; (iii) How much DR was realized; and (iv) how did you measure DR performance. This data should be available by month and possibly by zone within an RTO.

We discussed whether NERC needed to know the expected demand impact for just the peak day or for every hour of the year (as ERCOT does) and decided a monthly value would be sufficient to capture any de-rating patterns due to end-use variability or seasonality.[2] Bob Laurita and the group roughed out the DR statistical reporting scheme shown in Table 1.

Table 1: Sample DR Statistical Results Reporting Format

NERC Reporting Example											
ISO-NE											
Zone =											
3rd Quarter 2009											
Program	Year	Month	Total Days	Total Dispatched Hours	Registered (MW)	Committed MWs	Committed Hours	Avg. Dispatched (MW)	Avg. Achieved (MW)	Avg. Performance (%)	Test or Event?
RTDR	2009	June	5	15	2000			500	450	90%	
RTDR	2009	July	6	20	2100			600	500	83%	
RTDR	2009	August	10	30	2200			2000	1800	90%	
RTEG	2009	June	1	3	1000			200	150	75%	
RTEG	2009	July	2	5	1100			600	550	92%	
RTEG	2009	August	3	9	1200			1200	1300	108%	

Table 1 provides only the data that change monthly. All information that is static, including detailed program descriptions and functional characteristics, would appear in a separate tab or collection instrument that is submitted annually and updated only when there are changes. A separate table would catalogue individual events so the contributions of DR could be seen in broader context. Bob Laurita was kind enough to rough out a format for this as well (See Table 2), although I think it still needs work in terms of DR's significance (e.g., relative to system demand or operating reserves).

Table 2: Sample DR Event Reporting Format

	NERC Sample Event Report		4/30/2008							
	ISO-NE	Version 0.1								
Event Date	Resource Type	Program Name	Zone/Location	Event Type	Notification Time	Expected Full Commitment Time	Event End Time	Subscribed (MW)	Average Dispatched (MW)	Average Achieved Reduction (MW)
6/2/2009	Capacity	30-Min RT Demand Response	CT	Actual	12:30	13:30	15:00	800.00	500.00	450.00
6/2/2009	Capacity	30-Min RT Demand Response	NEMA	Actual	13:00	14:30	15:30	1000.00	200.00	223.00
6/5/2009	Capacity	30-Min RT Demand Response	System Wide	Audit	11:30	12:30	15:00	2000.00	600.00	500.00
8/2/2009	Capacity	30-Min RT Demand Response	System Wide	Actual	11:30	12:30	15:00	1000.00	800.00	723.00
10/5/2009	Capacity	DR Capacity Program	Southern Region	Actual	12:00	14:10	18:00	500.00	300.00	294.00
10/5/2009	Reserves	DR Reserves Program	Northern Region	Actual	11:00	11:10	11:40	600.00	250.00	212.50

[2] ERCOT prides itself on guaranteeing the dispatcher at least 1050 MW of responsive reserves from DR for any hour of the year.

Some logistics, including reporting frequency and data lag times, were discussed. RTOs would prefer annual reports; Mark expressed preference for monthly or quarterly reports, if only to make sure the reporting process becomes a regular routine. RTO representatives pointed out that availability of data lagged events by 2-3 months.

There was some discussion regarding the need for a succinct scoping or strategy statement for this activity that would supplement the DSM Task Force Report. This scoping/strategy statement would "connect the dots" in terms of what NERC is trying to do, how it relates to broader reliability assessment needs, why it is important for ISOs and RTOs to cooperate, what the data will be used for, and what efforts NERC has taken to minimize duplication and extra work load and anticipate potential retail-wholesale seams issues associated with data collection and interpretation. No resolution on need for such a scoping/strategy statement was reached during the meeting.

At the close Mark made some assignments to be completed ahead of the next meeting, scheduled for May 30:

Assignment	**Responsibility**
Event Data Sheet	Mark/Bob
Program Description /Characteristics	Grayson/Donna
Annual Roll-up Statistics	Mark/Mark/Paul/Steve
User Manual/Application Manual	Mark/Grayson
Who doing What	Erich
Use Cases	Bob E./Gordon D